

What is claimed is:

1 Al 1. A disposable absorbent article having a pair of longitudinally  
2 extending side edges and a pair of end edges extending between said side edges,  
3 said article comprising;  
4 a topsheet layer;  
5 a backsheet layer;  
6 an absorbent core disposed between said topsheet and said backsheet; and  
7 at least one end strip fixed intermediate said core and one of said end edges  
8 and extending between said side edges, said end strip including,  
9 a first section having generally elastic properties,  
10 a second section disposed longitudinally inward of said first  
11 section, said second section being characterized in that said first section is  
12 substantially more elastic than said second section, and  
13 a third section positioned longitudinally inward of said second  
14 section, said third section having an inward portion spaced away from said  
15 topsheet and said absorbent core.

1 2. The disposable absorbent article of claim 1, wherein said second  
2 section is formed from an elastic material, said second section having at least one  
3 void provided therein, said void being adapted to substantially de-elasticize an  
4 area of said second section adjacent said void.  
5

6 3. The disposable absorbent article of claim 1, wherein each of said  
7 first and second sections is secured to said topsheet.

1 4. The disposable absorbent article of claim 1, wherein said end strip  
2 is formed from an elastic material.

1           5.       The disposable absorbent article of claim 4, wherein said second  
2 section includes a plurality of voids adapted to substantially de-elasticize said  
3 second section.

1           6.       The disposable absorbent article of claim 1, wherein said first  
2 section forms a waistband portion.

1           7.       The disposable absorbent article of claim 1, wherein said first  
2 section is fixed along one of said end edges.

1           8.       The disposable absorbent article of claim 1, wherein said third  
2 section is formed from an elastic material.

1           9.       The disposable absorbent article of claim 1, wherein said third  
2 section includes a pair of side portions, each side portion being disposed laterally  
3 on one side of said inward portion, said disposable absorbent article further  
4 comprising:

5               a pair of side wall structures each having a pair of oppositely positioned  
6 end portions, wherein a first side wall structure is positioned between said core  
7 and one of said side edges and extends generally in the longitudinal direction, and  
8 said other side wall structure is positioned between said core and said other side  
9 edge and extends generally in the longitudinal direction; and

10           wherein each of said side portions of said third section is secured to one of  
11 said end portions of said side wall structure such that an intermediate portion of  
12 each of said side wall structure is biased generally upward.

1           10.      The disposable absorbent article of claim 9, wherein said third  
2 section is formed from an elastic material.

1           11.     The disposable absorbent article of claim 9, further comprising a  
2 containment pocket having a depth dimension and bounded by a substantially  
3 continuous containment wall disposed about said core, said intermediate portions  
4 of said side wall structures and said inward sections of said third sections of said  
5 end strips being disposed to define, at least partially, said containment wall.

1           12.     The disposable absorbent article of claim 11, wherein said depth  
2 dimension is defined as a vertical distance between an average elevation of an  
3 inward edge of said inward portion and an average elevation of a top surface of  
4 said core, said depth dimension being greater than about 1/4".

1           13.     The disposable absorbent article of claim 12, wherein said depth  
2 dimension is between about 3/4" and about 2".

1           14.     The disposable absorbent article of claim 9, wherein an  
2 intermediate portion of each of said side edges extending generally parallel with  
3 said core is biased upwardly through engagement with said side portions of said  
4 third sections to form, at least partially, one of said side wall structures.

1           15.     The disposable absorbent article of claim 9, wherein said side wall  
2 structure includes a portion of said topsheet and at least one elastic member  
3 secured thereto.

1           16.     The disposable absorbent article of claim 9, wherein said first and  
2 second sections are fixed to said topsheet, and said third section extends upwardly  
3 from said topsheet and said core, and wherein said first and third sections are  
4 substantially elastic, and said second section is substantially inelastic.

1           17.    The disposable absorbent article of claim 1, wherein said article has  
2 a front waist region, a back waist region longitudinally spaced from said front  
3 waist region, and a crotch region located between said front waist region and said  
4 back waist region, said core being disposed generally in said crotch region, said  
5 article further comprising an ear region extending laterally on each side of each of  
6 said front waist region and said back waist region, said end strip extending  
7 substantially laterally into two of said ear regions.

1           18.    The disposable absorbent article of claim 1, wherein said article has  
2 a front waist region and a back waist region each defined partially by one of said  
3 end edges, and wherein said end strip is constructed from an elastic material and is  
4 secured to said topsheet so as to provide tension across one of said waist regions.

1                   19.   A disposable absorbent article having a pair of longitudinally  
2                   extending side edges and a pair of end edges extending between said side edges,  
3                   said article comprising:  
4                   a topsheet layer;  
5                   a backsheet layer;  
6                   an absorbent core disposed between said topsheet and said backsheet;  
7                   a pair of side walls, each of said side walls having a pair of oppositely  
8                   positioned end portions and an intermediate portion disposed therebetween,  
9                   wherein a first side wall is positioned generally between said core and one of said  
10                  side edges and extends generally in the longitudinal direction, and said other side  
11                  wall is positioned generally between said core and said other side edge and  
12                  extends generally in the longitudinal direction; and  
13                  a pair of end strips, each of said end strips being fixed generally  
14                  intermediate said core and one of said end edges, and extending between said side  
15                  edges, each of said end strips including an elastic inward section spaced away  
16                  from said topsheet and said absorbent core, each inward section having a pair of  
17                  side portions, each side portion being secured to an end portion of one of said side  
18                  walls, such that said side walls are biased generally upwardly.

1                   20.   The disposable absorbent article of claim 19, further comprising a  
2                   containment pocket bounded by a substantially continuous containment wall  
3                   disposed about said core, said side walls and said elastic inward sections being  
4                   disposed to form, at least partially, said containment wall.

1                   21.   The disposable absorbent article of claim 20, wherein each of said  
2                   end strips further includes a fixed end section fixed substantially adjacent one of  
3                   said end edges.  
4

1           22.    The disposable absorbent article of claim 21, wherein said fixed  
2 end section is substantially elastic.

1           23.    The disposable absorbent article of claim 22, wherein each of said  
2 end strips further includes an intermediate section disposed between said inward  
3 section and said fixed end section, said intermediate section being substantially  
4 inelastic.

1           24.    The disposable absorbent article of claim 23, wherein each of said  
2 end strips is formed from an elastic material, said intermediate section having a  
3 plurality of voids adapted to substantially de-elasticize said intermediate section.

1           25.    The disposable absorbent article of claim 20, wherein an  
2 intermediate portion of each of said side edges extending generally parallel with  
3 said core is disposed in engagement with said side portions of said elastic inward  
4 sections so as to be biased upwardly to form, at least partially, one of said  
5 sidewalls.

1           26.    The disposable absorbent article of claim 20, wherein said side  
2 walls is formed by a portion of said topsheet and at least one elastic member  
3 secured thereto.

1           27.    The disposable absorbent article of claim 20, wherein said pocket  
2 has a depth dimension defined as an average vertical distance between an inward  
3 edge of said inward section and an average elevation of said core, said depth  
4 dimension being greater than about 1/2".

1           28.    The disposable absorbent article of claim 27, wherein said depth  
2 dimension is between about 3/4" and about 2".

1  
2 29. The disposable absorbent article of claim 19, wherein said end strip  
3 includes a fixed end section that is substantially elastic, said end section being  
4 fixed at a location intermediate one of said end edges and said elastic inward  
5 section.

1 30. The disposable absorbent article of claim 29, wherein said fixed  
2 end section is disposed substantially adjacent one of said end edges to form an  
3 elastic waistband portion.

1 31. The disposable absorbent article of claim 29, wherein each of said  
2 end strips further includes an intermediate section disposed between said fixed end  
3 section and said elastic inward section, said intermediate section being  
4 characterized in that said fixed end section is substantially more elastic than said  
5 intermediate section.

1 32. The disposable absorbent article of claim 31, wherein each of said  
2 end strips is formed from an elastic material.

1 33. The disposable absorbent article of claim 32, wherein said  
2 intermediate section includes a plurality of voids adapted to substantially de-  
3 elasticize said intermediate section.

1 34. The disposable absorbent article of claim 31, wherein said  
2 intermediate section is fixed to said topsheet.

1 35. The disposable absorbent article of claim 19, wherein said end strip  
2 further includes an affixation section disposed intermediate one of said end edges  
3 and said inward section, said affixation section affixing said end strip to said

1 topsheet, and wherein said inward section is substantially more elastic than said  
2 affixation section.

1 36. The disposable absorbent article of claim 35, wherein said end strip  
2 is formed from an elastic material, said fixed section having a plurality of voids  
3 provided therein, said voids adapted to substantially de-elasticize said fixed  
4 section.

1 37. The disposable absorbent article of claim 19, wherein said article  
2 defines a front waist region adjacent one of said end edges, a back waist region  
3 adjacent said other end edge, and a crotch region located between said front waist  
4 region and said back waist region, said core being disposed in said crotch region,  
5 said article further comprising an ear region extending laterally from each side of  
6 each of said front waist region and said back waist region, each one of said end  
7 strips extending substantially laterally into one of said ear regions.



1           38.     A disposable absorbent article having a pair of longitudinally  
2 extending side edges and a pair of end edges defining a front waist region, a back  
3 waist region, and a crotch region located between said front and back waist  
4 regions, said article comprising:

5           a topsheet layer;  
6           a backsheet layer;  
7           an absorbent core disposed between said topsheet and said backsheet; and  
8           a containment pocket having a depth dimension, said pocket being  
9 disposed generally in said crotch region and bounded by a substantially  
10 continuous containment wall that extends generally upwardly from said topsheet  
11 to retain exudates therein, said containment wall having at least two elastic wall  
12 sections and at least two intermediate wall sections, each intermediate wall section  
13 being disposed between one elastic wall section and another elastic wall section;  
14 and

15           wherein each of said elastic wall sections has a central portion and  
16 oppositely disposed side portions and each of said intermediate wall sections has  
17 oppositely disposed end portions, each of said side portions of said elastic wall  
18 sections being secured to an end portion of one of said intermediate wall sections  
19 such that said intermediate wall sections are biased generally upwardly.

1           39.     The disposable absorbent article of claim 38, further comprising an  
2 end strip secured generally to each one of said waist regions, said end strip  
3 including an elastic inward section spaced away from said topsheet and said  
4 absorbent core, said elastic inward sections forming said elastic wall sections of  
5 said containment wall.

1           40.     The disposable absorbent article of claim 39, wherein each of said  
2 end strips includes a fixed end section fixed substantially adjacent one of said end  
3 edges.

1           41.    The disposable absorbent article of claim 40, wherein said fixed  
2 end section is substantially elastic.

1           42.    The disposable absorbent article of claim 41, wherein said fixed  
2 end section is disposed substantially adjacent one of said end edges to form an  
3 elastic waistband portion.

1           43.    The disposable absorbent article of claim 41, wherein each of said  
2 end strips further includes an intermediate section disposed between said inward  
3 section and said fixed end section, said intermediate section being substantially  
4 inelastic.

1           44.    The disposable absorbent article of claim 43, wherein each of said  
2 end strips is formed from an elastic material, said intermediate section having a  
3 plurality of voids provided therein, said voids being adapted to substantially de-  
4 elasticize said intermediate section.

1           45.    The disposable article of claim 39, wherein each of said end strips  
2 is formed from an elastic material, said end strip further including a fixed section  
3 that is substantially de-elasticized.

1           46.    The disposable absorbent article of claim 38, wherein an  
2 intermediate portion of each of said side edges extending generally parallel with  
3 said core is disposed in engagement with said side portions of said elastic wall  
4 sections so as to be biased upwardly to form, at least partially, one of said  
5 intermediate wall sections.

1           47.    The disposable absorbent article of claim 38, wherein said  
2 intermediate wall section is formed by a portion of said topsheet and at least one  
3 elastic member secured thereto.

1           48.    The disposable absorbent article of claim 38, wherein said pocket  
2 has a depth dimension defined as an average vertical distance between an inward  
3 edge of said inward section and an average elevation of a top surface of said core,  
4 said depth dimension being greater than about  $\frac{1}{2}$ ".

1           49.    The disposable absorbent article of claim 38, wherein said depth  
2 dimension is between about  $\frac{1}{2}$ " and about 4".

3  
4           50.    The disposable absorbent article of claim 38, wherein said depth  
5 dimension is between about  $\frac{3}{4}$ " and about 2".

1           51.    The disposable absorbent article of claim 38, wherein said elastic  
2 wall sections are formed from a substantially elastic material.

1           52.    The disposable absorbent article of claim 51, wherein said elastic  
2 wall section is distinct from said topsheet.

1           53.    The disposable absorbent article of claim 38, wherein each of said  
2 elastic wall sections is formed, at least partially, by a portion of said topsheet.

54. A disposable absorbent article having a pair of longitudinally extending side edges and a pair of end edges defining a front waist region, a back waist region, and a crotch region, said article comprising:

- a topsheet layer;
- a backsheet layer;
- an absorbent core disposed between said topsheet and said backsheet;
- a pair of side walls, each side wall having oppositely disposed end portions, wherein one of said side walls extends generally longitudinally between said core and one of said side edges and said other side wall extends generally longitudinally between said core and said other side edge,
- a containment pocket disposed generally in said crotch region, said containment pocket being bounded by a substantially continuous sidewall disposed about said core and adapted to retain exudates received in said pocket; and
- an end strip secured to each one of said front and back waist regions, said end strip including,
  - a fixed waist section fixed intermediate said core and one of said end edges, said waist section including an elastic end section disposed substantially adjacent said end edge to form an elastic waistband on one of said front and back waist regions, and
  - an elastic inward section disposed longitudinally inward of said fixed waist section, said inward section having a central portion substantially spaced from said topsheet and said absorbent core; and

wherein each of said inward sections is secured to said end portions of said side walls such that said side walls are biased generally upward, said inward sections and said side walls substantially forming said continuous sidewall of said containment pocket.

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1 55. The disposable absorbent article of claim 54, wherein each of said  
2 side portions is secured to one of said end portions of said side walls to apply a  
3 contractile force between said side walls.

1 56. The disposable absorbent article of claim 55, wherein each of said  
2 side walls includes a portion of said topsheet and at least one elastic member  
3 secured thereto.

1 57. The disposable absorbent article of claim 56, wherein an  
2 intermediate portion of each of said side edges extending generally parallel with  
3 said core is biased generally upwardly to form, at least partially, said side walls.

1 58. The disposable absorbent article of claim 55, wherein each of said  
2 end strips is distinct from said topsheet and is formed from an elastic material.

1 59. The disposable absorbent article of claim 58, wherein said fixed  
2 waist section further includes an intermediate section disposed between said  
3 elastic end section and said inward section, said intermediate section having a  
4 plurality of voids provided therein adapted to substantially de-elasticize said  
5 intermediate section.

1 60. The disposable absorbent article of claim 54, wherein said pocket  
2 has a depth dimension defined as an average vertical distance between an inward  
3 edge of said inward section and an average elevation of a top surface of said core,  
4 said depth dimension being between about 1/2" and about 4".

1                   61.     A disposable absorbent article having a pair of longitudinally  
2     extending side edges and a pair of end edges defining a front waist region, a back  
3     waist region, and a crotch region, said article comprising:

4                   a topsheet layer;

5                   a backsheet layer;

6                   an absorbent core disposed between said topsheet and said backsheet;

7                   a containment pocket disposed generally in said crotch region, said  
8     containment pocket being bounded by a substantially continuous peripheral wall  
9     disposed about said core and adapted to retain exudates received in said pocket

10                  a pair of side walls each having a pair of oppositely disposed end portions,  
11     one of said side walls extending generally longitudinally between said core and  
12     one of said side edges and said other side wall extending generally longitudinally  
13     between said core and said other side edge, wherein each of said side walls  
14     includes an intermediate portion of each of said side edges that extends generally  
15     parallel with said core and at least one elastic member secured to said topsheet;  
16     and

17                  an end strip secured to each one of said front and back waist regions, said  
18     end strip being formed from an elastic material and including,

19                   an elastic end section fixed to said topsheet at a location  
20     substantially adjacent said end edge to form an elastic waistband on one of said  
21     front and back waist regions,

22                   a substantially non-elastic intermediate section extending inwardly  
23     from said elastic end section, said intermediate section being fixed to said topsheet  
24     and having a plurality of voids provided therein, said voids being adapted to  
25     substantially de-elasticize said intermediate section, and

26                   an elastic inward section extending longitudinally inward of said  
27     intermediate section, said inward section having a central portion substantially  
28     spaced away from said topsheet and said absorbent core; and

1            wherein each of said inward sections is secured to said end portions of said  
2 side walls to apply a contractile force between said side walls and such that said  
3 side walls are biased generally upward, said inward sections and said side walls  
substantially forming said peripheral wall of said containment pocket.

1            62.    The disposable absorbent article of claim 61, wherein said pocket  
2 has a depth dimension defined as an average vertical distance between an inward  
3 edge of said inward section and an average elevation of a top surface of said core,  
4 said depth dimension being between about ½" and about 4".

1           63.    A disposable absorbent article having a pair of longitudinally  
2           extending side edges and a pair of end edges defining a front waist region, a back  
3           waist region, and a crotch region located between said front and back waist  
4           regions, said article comprising:  
5                a topsheet layer;  
6                a backsheet layer;  
7                an absorbent core disposed between said topsheet and said backsheet;  
8                a containment pocket disposed generally in said crotch region and bounded  
9           by a substantially continuous containment wall that extends generally upwardly to  
10          retain exudates therein;  
11          a pair of tensioned regions disposed on oppositely disposed first and  
12          second sides of said core, said tensioned regions having a pair of oppositely  
13          disposed side portions and an inward edge portion spaced generally upwardly  
14          relative to said core so as to form a portion of said containment wall; and  
15          a pair of side wall regions disposed on oppositely disposed third and fourth  
16          sides of said core, each of said side wall regions having a pair of oppositely  
17          disposed end portions, wherein each of said end portions of said side wall regions  
18          is secured to a side portion of one of said tensioned regions such that an  
19          intermediate portion of said side wall region is biased generally upwardly and  
20          forms a portion of said containment wall.

1           64.    The disposable absorbent article of claim 63, wherein each of said  
2           tensioned regions includes a portion of said topsheet.

1           65.    The disposable absorbent article of claim 63, wherein each of said  
2           tensioned regions is located in one of said front and back waist regions, and each  
3           of said side wall regions includes a portion of said side edges.



1           66.    The disposable absorbent article of claim 65, further comprising an  
2 elastic end strip disposed intermediate said core and one of said end edges and  
3 extending laterally between said side edges, said end strip including,  
4           an elastic first section disposed substantially adjacent said end  
5 edge,  
6           a de-elasticized second section disposed longitudinally inward of  
7 said first section, said second section including a plurality of voids provided  
8 therein to substantially de-elasticize said second section, and  
9           an elastic third section positioned longitudinally inward of said  
10 second section, said third section including said tensioned region.

1           67.    The disposable absorbent article of claim 66, wherein said  
2 containment pocket has a depth dimension of between about 3/4" and about 2",  
3 said depth dimension being a vertical distance between a top edge of said inward  
4 edge portion and an average elevation of a top surface of said core.